

REMARKS

Claims 2, 7-11, 13-15, and 17-20 are pending in this application, with claims 2, 7-11 and 17-18 withdrawn from consideration. Claims 2, 7-11, 17 and 18 are canceled without prejudice or disclaimer, and claims 13-15 are amended herein. Upon entry of this amendment, claims 13-15, 19 and 20 will be pending. Entry of this amendment and reconsideration of the rejections are respectfully requested.

No new matter has been introduced by this Amendment. Support for the amendments to the claims is detailed below.

Interview Summary

Applicant's agent conducted a telephonic interview with Examiner Weiner on June 23, 2011. The interview focused on the rejections under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) over the Fujii et al. WO '299 (corresponding to US '317) reference.

In the interview, the main issue discussed was whether Fujii et al. discloses the limitations of claim 13 of "the electrolyte of each single cell being disposed on the substrate" and "the anode and the cathode being disposed on the electrolyte and separated by a predetermined space from each other."

In the interview, Applicant and the Examiner were in general agreement as to what is shown in Figure 1 of Fujii, and that this is different from what is shown in the drawings of our application. In particular, as stated in the Office action, in Fujii, the electrolyte 13 is sandwiched between the electrode layer 12 and the electrode layer 14, while in the drawings of the present

application, the anode 5 and cathode 7 of an electrode pair are on the same surface of an electrolyte, with a predetermined space between anode 5 and cathode 7.

However, the opinion of the Examiner was that the present wording of claim 13, “the anode and the cathode being disposed on the electrolyte and separated by a predetermined space from each other,” does not require that the anode and the cathode be on the same side of the electrolyte. Moreover, the opinion of the Examiner was that the recitation, “the electrolyte of each single cell being disposed on the substrate” only requires that the electrolyte touch the substrate at some point.

The Examiner indicated that amended wording along the lines of: “the anode and the cathode being disposed on the same side of the electrolyte and on the opposite side of the electrolyte from the substrate, and separated by a predetermined space from each other” would probably distinguish the claims from the Fujii reference.

Claims 2, 7-11, 17-18 are withdrawn from further consideration. (Office action paragraph no. 2)

Claims 2, 7-11 and 17-18 have been canceled without prejudice or disclaimer.

Claims 13-14, 19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 7,517,601. (Office action paragraph no. 5)

The rejection is obviated by the filing of a terminal disclaimer over U.S. Patent No. 7,517,601.

Claims 13, 15 and 20 are rejected under 35 U.S.C. §102(b) as being anticipated by Fujii et al., WO 02/080299 and/or under 35 U.S.C. §102(e) as being anticipated by Fujii et al., US 7,081,317. (Office action paragraph no. 6)

Claims 14 and 19 are rejected under 35 U.S.C. §102(b) as being anticipated by, or alternatively unpatentable over, Fujii et al., WO 02/080299 and/or under 35 U.S.C. §102(e)/103(a) as being anticipated by, or alternatively unpatentable over, Fujii et al., US 7,081,317. (Office action paragraph no. 7)

Reconsideration of the rejections is respectfully requested in view of the amendments to claims 13, 14 and 15.

Summary of the rejection as stated

In the rejection, the Examiner assigns the elements of Fujii et al. as follows:

Claim 13	Fujii et al.
Substrate	substrate 11
Electrolyte	electrolyte thin membrane 13
Anode (“fuel electrode”)	first catalyst electrode layer 12
Cathode (“air electrode”)	second catalyst electrode layer 14
Interconnector	connector 15

The Examiner also notes that “mask layer” (protection layer) 17 is removed to produce the finished cell.

The Examiner states that in Fig. 1, the electrolyte 13, fuel electrode 12 and air electrode 14 each contact a first surface of the substrate 11, with the electrolyte located between the fuel electrode 12 and the air electrode 14. Fig. 4 is cited as disclosing a second thin film fuel cell formed on a second surface of a substrate.

Arguments

Claims 13, 14 and 15 have each been amended for clarity, as follows: “the electrolyte of each single cell being disposed on the same side of the electrolyte and on the opposite side of the electrolyte from the substrate, and separated by a predetermined space from adjacent electrolytes”

This amendment is a clarifying amendment, and is supported by the general disclosure and drawings of the application. For example, as shown in Figs. 1, 3, 4, 5, etc., anode 5 and cathode 6 are disposed on the same side of the electrolyte 3, and are on the opposite side of the electrolyte from the substrate 1. Claim 13 is illustrated, for example, in Fig. 5, which illustrates two single cells, E₁ and E₂, and interconnector 9.

Applicant submits that the structure of Fujii’s Fig. 1 is clearly inconsistent with the amended claims. Fujii’s first catalyst electrode layer 12 and second catalyst electrode layer 14 correspond to the anode and cathode of the present claims, but electrolyte thin membrane 13 is sandwiched between layer 12 and layer 14, and all three layers are lying on mask layer 17 and substrate 11. Therefore, in Fujii, the anode and cathode are **not** on the same side of the electrolyte 13, and layer 12 is **not** on the opposite side of the substrate from the electrolyte 13.

It would be impossible to modify Fujii et al. to meet the structural limitations of the claims without completely changing the structure taught in Fujii et al.

In the interview conducted on June 23, 2011, as summarized above, the Examiner indicated that this amendment would probably distinguish the claims from the Fujii et al. reference.

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Applicant therefore submits that the claims, as amended, are not anticipated by and are not obvious over Fujii et al.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

KRATZ, QUINTOS & HANSON, LLP



Daniel A. Geselowitz, Ph.D.
Agent for Applicants
Reg. No. 42,573

DAG/xl

Atty. Docket No. **050829**
4th Floor
1420 K Street, N.W.
Washington, D.C. 20005
(202) 659-2930



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